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C L A I M S

1.-Device for the infusion of coffee, which is characterised in that it comprises a heat exchanger (1), an infusion mechanism (2) and a coffee dosage carrying mechanism (3) coupled vertically and integrally in continuation from the other and defining a longitudinal axis (Y-Y), in which the heat exchanger (1) is provided with water inlet means and water outlet means at a higher temperature; the infusion mechanism 5 (2) comprises a water inlet chamber (25) coming from the heat exchanger (1) and an outlet chamber (26) adapted for receiving the dosage; and the dosage carrying mechanism (3) comprises a longitudinal movement mechanism provided with a drive arm (31), capable of rotating in both directions around said longitudinal axis (Y-Y), all of which is adapted in such a way that, once the dosage has been placed in the dosage carrying mechanism 10 (3), the rotation of the drive arm (31) in one direction brings about the upward vertical movement of the dosage, placing it in the infusion mechanism (2) outlet chamber (26), whereas the rotation of the drive arm (31) in the opposite direction to the previous one brings about the downward movement of the dosage 15 used, allowing its extraction.

2.-Device according to claim 1, which is characterised in that the infusion mechanism (2) comprises an intermediate body 25 (4) fastened to the heat exchanger (1) and provided with a stepped centred through orifice (12), configuring three successive portions in progressively decreasing section from top to bottom, in which the upper portion (13) is adapted for housing 30 a tightening discoidal element (5), provided with a centred through orifice for the water coming from the heat exchanger (1), and a membrane (7), the water inlet chamber (25) being defined between the discoidal element (5) and the membrane (7), whereas the intermediate portion (14) and the lower portion 35 (15) are adapted for housing a piston (8) provided with a centred through orifice (17), in which a retention valve (9),

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integral to the membrane (7) is housed and, at its lower end, to a cavity which configures the outlet chamber (26).

3.- Device according to claims 1 and 2, which is characterised in that the dosage carrying mechanism (3) comprises a tubular body (28) that houses a thrust body (29) and a dosage carrying body (30), all of them being arranged co-axially and mutually coupled, in which the tubular body (28) is provided at its upper end with means (32, 33) for its fastening to the intermediate body (4) of the infusion mechanism (2), and laterally, has spacious apertures (34) adapted for allowing the dosage to pass therethrough, before and after being used, and, at its lower end, has means (35, 37, 38, 39) for the coupling of the thrust body (29) and of the dosage carrying body (30); the thrust body (29) is fastened to the drive arm (31) and has a centred through orifice (49); and the dosage carrying body (30) has a cavity (43) for receiving a dosage and has outlet means (44, 45) of the infusion which go through the centred through orifice (49) of the thrust body (29).

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4.- Device according to claims 1 to 3, which is characterised in that the longitudinal movement mechanism comprises, both in the thrust body (29) and laterally, two radial thrust protuberances (40) adapted for being housed in respective thrust helicoidal grooves (46) which the dosage carrying body (30) is provided with, the dosage carrying body (30) also being provided with two radial guide protuberances (47) adapted for being housed in respective guide grooves (36) which the tubular body (28) is provided with, all of it being adapted in such a way that the rotation of the drive arm (31) causes the thrust body (29) to turn and the sliding of the radial thrust protuberances (40) through the thrust helicoidal grooves (46) of the dosage carrying body (30), which is thrust vertically, guided by the radial guide protuberances (47) through the guide grooves (36) in the direction corresponding to the rotation of the drive arm (31).